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ELECTRIC LIGHT & POWER

EL&P

NOVEMBER 1991
Volume 69, Number 11
A PENNWELL PUBLICATION

VOICE OF THE ELECTRIC UTILITY INDUSTRY

LATE NEWS

Tucson Electric Power Co. received an annual base rate hike of about $71 million, increasing revenues by 15 percent. A judge granted a third extension, to Nov. 26, to complete a restructuring plan and avoid a forced bankruptcy filing. If TE enters bankruptcy protection before '93, or if petitions from six creditors to force TE to file aren't withdrawn by '92, TE must refund the rate hike.

Wind-fallen power lines were at least partially to blame for fires in western states (WA, ID, MT, OR) that destroyed over 100 homes.

Detroit Edison named '91 Utility of the Year

BARRINGTON, IL—*Electric Light & Power* magazine named Detroit Edison the 1991 Electric Utility of the Year. The company was selected for its outstanding financial performance, excellence in operating utility facilities, and positive steps toward ensuring future strengths for customers, shareholders and employees.

"After the Fermi-2 rate settlement, Detroit Edison might have coasted into the mid-1990s," explained Robert A. Lincicome, Editor-in-Chief. "The utility chose instead to identify and capitalize upon additional opportunities."

Special report p. 13

John E. Lobbia, chairman, president and CEO, gladly accepted the honor on behalf of all employees, and encouraged their continued efforts.

"We're really proud of the job the Detroit Edison team has done. But we're not done yet."

Lobbia explained that DE's 1990 results included record revenues, near-record sales and record earnings for common stock with a 23-percent increase in earnings. Fuel and other power supply costs fell, significant improvements of power delivery reliability continued, and efficiency climbed as DE delivered more electricity to more customers with 14 percent fewer employees than three years ago.

Lincicome pointed out that DE also appeared among the top 10 in heat rate in the "Top 100 Operating Performance" and among the top 20 in "Top 100 Financial Performance," exclusive *EL&P* reports. Another DE accomplishment has been significant changes to its "corporate culture."

The *EL&P* editorial staff chose DE for the 23rd annual award after an extensive review of the investor-owned segment of the electric utility industry.

Dayton Power & Light Co. and Duquesne Light Co. were also nominated as finalists in this year's competition in what Lincicome characterized as "an extremely close selection process."

Pittsburgh, PA-based Duquesne Light was cited for economic development of its service territory, and turning modest sales and revenue increases into significant earnings per share gains. Also impressive were plans to restart two existing plants, sell 500 MW to General Public Utilities, and jointly build a new 200-mile transmission line.

DP&L's performance has shown consistant operational excellence, especially in equivalent availability and heat rate. DP&L was one of three owners to bring the Zimmer Station on line, the first nuclear-to-coal conversion, on time and under budget, Lincicome noted. It also received a presidential award for involvement with education.

After a severe July storm, Detroit Edison's John Lobbia talks about present and planned reliability upgrades with a few of 700,000 affected customers. Lobbia, chairman, president and CEO, asks that all DE executives meet with customers regularly. Most visits are under more favorable circumstances.

Electric Utility of the Year 1969-1991

1991	Detroit Edison
1990	Pennsylvania Power & Light
1989	PacifiCorp
1988	General Public Utilities
1987	Consumers Power
1986	Minnesota Power
1985	South Carolina E&G
1984	Potomac Electric
1983	Oklahoma Gas & Electric
1982	Wisconsin Electric Power
1981	Atlantic Electric
1980	Boston Edison
1979	New England Electric
1978	Southwestern P.S.
1977	Duke Power
1976	Tampa Electric
1975	Southern Calif. Edison
1974	Florida Power & Light
1973	Carolina Power & Light
1972	Northern States Power
1971	Virginia Electric & Power
1970	Florida Power Corp.
1969	Sierra Pacific Power

Conference & exhibition sets records

IEEE/PES technology show, sessions cover wide areas in power delivery

H. Wayne Beaty, Senior Editor T/D
Mark T. Hoske, News Editor

DALLAS—Record attendance, 450 exhibits showing the latest in power delivery equipment and related technologies, 77 technical sessions, and 7 inspection tours were among the highlights of the 12th IEEE/PES T&D Conference and Exhibition.

Some 14,061 utility engineers, manufacturers and suppliers attended the record-breaking meeting, which is held every 30 months. Over 1600 international visitors from 45 countries were in attendance—also a record for this meeting. The conference, held here Sept. 22-27, was titled "T and D: New Technological Frontiers."

The opening panel of utility executives and resulting discussions and debate covered increased utility competition, possible industry restructuring, and changing industry attitudes. Transmission access; efficiency; public concerns about EMF, transmission siting; the need for better, more reliable service; and electric technologies were among other topics addressed. Audience questions brought responses to other concerns, including global warming and prospects for renewed nuclear plant orders.

The opening panel was moderated by Harold Scherer Jr., president and chief operating officer of Commonwealth Electric Co. and also president of the Power Engineering Society (PES) of the Institute of Electrical and Electronic Engineers (IEEE).

Charles F. Clark, assistant administrator for engineering, Bonneville Power Administration, said, "With transmission lines at or near their capacity, we must look for regional ways to solve our power problems. Traditional methods may no longer be viable and we must consider all alternatives." Clark said utilities could advance reliability through greater cooperation and sharing more system data.

Clark further stated that due to public concerns about environment and effects of electric and magnetic field expo-

Continued on page 24

A few of the record-breaking 14,000 attendees view exhibits at the 12th IEEE/PES T&D Conference and Exhibition. Some 450 exhibitors displayed the latest in T&D products and services for the electric utility industry. Over 1600 international visitors from 45 countries attended the five-day meeting.

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News Briefs

JILL MINNER, Special Projects Editor

BPA pays over $600M to U.S. Treasury

The Bonneville Power Administration (BPA) said its payment to the U.S. Treasury for fiscal 1991 totalled over $601 million. The breakdown of BPA's payment is: $317 million in interest, $176 million to amortize this year's portion of the principal, and $108 million for U.S. Army Corps and Bureau of Reclamation operation and maintenance of federal dams.

According to BPA, this is the eighth consecutive year it has paid the Treasury more than $600 million. BPA's total Treasury payments amount to more than $5.5 billion in interest and $1.8 billion in principal payments.

GE to help WPPSS boost plant output

Washington Public Power Supply System (WPPSS) has approved two contracts with General Electric Co. (GE) to increase the power output and reliability of the utility's 1100-MW WNP plant.

The first project involves a three-year program in which GE will redefine the operating limits on all plant systems and equipment. Cost of the project, which is being funded by the Bonneville Power Administration, is estimated at $18.3-$25.7 million, said the utility.

Under the second contract, GE will design adjustable-speed drives for two recirculation pump motors and provide all the hardware and controls. WPPSS projects the total cost to be $10 million.

Bechtel Power Corp. will provide additional services for both projects under existing contracts.

NARUC issues utility and carrier reg report

The National Association of Regulatory Utility Commissioners has released its *Annual Report on Utility and Carrier Regulation*. The 1060-page report profiles over 100 federal, state and Canadian regulatory agencies, provides agency histories, and summarizes all cases considered during 1990 and early 1991. It also contains summaries of rate cases for miscellaneous utilities and carriers.

The report includes a detailed subject index, more than 500 pages of tables and charts, and a glossary of terms used in utility and carrier regulation.

A copy of the report is available for $70 from NARUC, P.O. Box 684, Washington, DC, 20044.

Siemens buys ACES

Siemens announced that Siemens KWU, the Power Generation Group of Siemens AG, Erlangen, Germany, has acquired A-C Equipment Services Corp. (ACES). ACES provides parts, services and modernization of utility and industrial steam turbines, generators, static exciters and electro-mechanical devices.

Siemens said the acquisition will enhance its service capabilities for gas and steam turbine generators.

NIPSCO laser show benefits needy

A series of laser shows were recently held at Northern Indiana Public Service Co.'s (NIPSCO) Michigan City generating station. Each one-hour show featured laser images choreographed to music and projected onto one of NIPSCO's cooling towers. Proceeds from the shows were donated to "Gift of Warmth," an energy assistance program sponsored by the utility.

Residential electric bills last winter increased 4.8%, NARUC reports

Twelve Most Expensive Companies

Company Name	State	Avg. Cost Cents/kWh	Winter 90-91 National Rank
Kauai Electric Co.	Hawaii	$0.163	1
Nantucket Electric Co.	Massachusetts	$0.162	2
Hawaii Electric Light Co.	Hawaii	$0.157	3
Long Island Lighting Co.	New York	$0.157	4
Maui Electric Co.	Hawaii	$0.149	5
Consolidated Edison Co. of N.Y.	New York	$0.139	6
Philadelphia Electric Co.	Pennsylvania	$0.139	7
Commonwealth Electric Co.	Massachusetts	$0.138	8
Duquesne Light Co.	Pennsylvania	$0.128	9
Orange & Rockland Utilities, Inc.	New York	$0.127	10
Pennsylvania Power Co.	Pennsylvania	$0.126	11
Western Mass. Electric Co.	Massachusetts	$0.125	12

Twelve Least Expensive Companies

Company Name	State	Avg. Cost Cents/kWh	Winter 90-91 National Rank
Washington Water Power Co.	Idaho	$0.042	186
Pacific Power & Light Co.	Washington	$0.043	185
Washington Water Power Co.	Washington	$0.044	184
Idaho Power Co.	Idaho	$0.047	183
Idaho Power Co.	Oregon	$0.047	182
Portland General Elec. Co.	Oregon	$0.051	181
Potomac Electric Power Co.	Dist. of Col.	$0.052	180
Kentucky Utilities Co.	Kentucky	$0.052	179
Puget Sound Power & Light Co.	Washington	$0.054	178
Minnesota Power & Light Co.	Minnesota	$0.055	177
PacifiCorp	Oregon	$0.055	176
Utah Power & Light Co.	Wyoming	$0.056	175

Source: National Association of Regulatory Utility Commissioners

Customers' electric bills rose approximately 4.8 percent between 1990 and 1991, according to the National Association of Regulatory Utility Commissioners' (NARUC) winter survey of residential electric utility bills. During that same period, the Consumer Price Index increased 6.1 percent.

A regional comparison reveals that customer's bills in the Northeast and New England were the most expensive in the nation, while Northwest and Rocky Mountain customers had the least expensive bills (see table).

The average cost of electricity across the nation was 8.7 cents per kWh, up 0.4 cents per kWh from NARUC's 1989-90 winter survey. However, NARUC points out that as a result of current demand-side management programs, simple kilowatt hour comparisons are not always an accurate reflection of the true cost of electricity for retail customers.

Personnel briefs

Randall W. Hardy replaces James J. Jura as head of the **Bonneville Power Administration,** according to the Department of Energy. Hardy has served as CEO of **Seattle City Light** since 1984, and is president of the **American Public Power Association**. Jura is now general manager of **Associated Electric Cooperative Inc.**

Public Service Electric and Gas Co. named Lawrence R. Codey president and chief operating officer. Codey was previously senior vice president-electric. Former PSE&G President E. James Ferland remains chairman and chief executive officer.

Stanley T. Skinner was appointed president and chief operating officer of **Pacific Gas and Electric Co.** He succeeds George A. Maneatis who retired Nov. 1.

Montana Power Co. has chosen Daniel T. Berube as chief executive officer of the utility. Berube joined Montana Power as a mechanical engineer, and was most recently president and CEO of Entech.

William D. Steinmeier, chairman of the Missouri Public Service Commission, was named as the 100th president of the **National Association of Regulatory Utility Commissioners.** Steinmeier replaces William A. Badger who resigned from the Maryland Public Service Commission to become president of the **Pennsylvania Electric Association.**

Puget Power seeks bids

Puget Sound Power & Light Co. is seeking proposals from non-utility sources for new long-term energy supplies. The utility said it wants 100 to 200 MW, from either conservation or generation resources, for the 1995 to 1998 period.

Bids are due Jan. 9, 1992.

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Yankee Atomic Electric closes Yankee Rowe N-plant

NRC staff prompted shutdown; modifications possible; differences in interpreting data

Yankee Atomic Electric voluntarily closed the Yankee Rowe nuclear plant on Oct. 1, prior to the scheduled April '92 outage and extensive reactor vessel tests.

On Sept. 30, Nuclear Regulatory Commission staff recommended the commission close the reactor because of concerns about core embrittlement and possible pressure vessel failure if emergency cooling occurred.

NRC staff reported that revised calculations from previous studies of core embrittlement (*EL&P*, 9/91, p.1) had increased concern about the risk.

Yankee Rowe personnel disagreed with the staff's assessment of data and met with NRC staff to discuss the findings. An NRC spokesman said the two sides differ in the interpretation of the data. The plant cannot be restarted without commission approval.

The 167-MW, 31-year-old unit has had a positive operating record, and plans were made to seek a 20-year license extension. The 40-year operating license was due to run out in 2000.

Additionally, more comprehensive tests are likely. Various modifications had been proposed to reduce risk in a partial coolant-loss accident, such as premixing emergency cooling water with hot vessel water to mitigate thermal shock to the pressure vessel.

With a current surplus of power in New England, the shutdown isn't likely to create any immediate shortage. Yankee Atomic, with a take-or-pay contract, operates the plant for 10 owners, including Northeast Utilities, New England Electric System, Boston Edison and Central Maine Power Co.

UtiliCorp acquires Centel properties

KANSAS CITY, MO—UtiliCorp United finalized the previously announced $346-million acquisition of Centel's Kansas and Colorado electric utility properties. UtiliCorp renamed the 136,000-customer areas WestPlains Energy and will operate them as a single division based in Pueblo, CO.

Final regulatory approvals came late in September from the Federal Energy Regulatory Commission and Kansas state regulators.

UtiliCorp will pay $210.5 million for electric transmission, distribution and some generation assets and will assume liabilities of about $21.3 million.

"In financial terms, this is the largest acquisition UtiliCorp has completed," said UtiliCorp Chairman President Richard C. Green Jr. "This was a very important step forward in our ongoing effort to build a larger, stronger and more competitive utility company."

The deal also involves Citibank, which paid Centel $114.6 million for 8-percent ownership interest in the 2020-MW, coal-fired Jeffrey Energy Center, near Topeka, KS. UtiliCorp will pay Citibank $10.4 million a year for 161 MW of baseload capacity over a 27.5-year operating lease.

In an unrelated transaction, UtiliCorp paid about $39 million to EnCap Financial Services Inc. for remaining ownership interest of Clajon Holdings LP, a 1200-mile intrastate gas transmission and gathering network.

UtiliCorp is seeking regulatory approval to offer as many as 5.75-million shares of stock, and plans to sell $150 million in senior notes.

The Kansas City, MO-based UtiliCorp now serves about 966,000 customers in eight states and British Columbia and has various non-regulated utility and energy-related enterprises.

BPA boosts transmission and substation capacity

PORTLAND, OR—The Bonneville Power Administration will boost transmission and substation facilities to carry an additional 1800 MW to meet the Puget Sound area's energy needs through 2003.

Included will be the addition of static var compensators (SVC) at two substations—one near Renton, WA, and the other near Portland. The contract for the two SVCs, associated buildings and equipment for $45 million was the largest of its kind for Asea Brown-Boveri, who will supply the equipment.

More than 70 percent of the Puget Sound area's electricity is supplied through 150-mile long transmission lines from hydroelectric dams and power plants east of the Cascade Mountains to Seattle.

Mark Reynolds, assistant director, Electrical and Electronics Division, said, "Winter peak demand in the Puget Sound area has been growing by about 200 MW a year. These compensators will help regulate voltage. They can react to voltage dips in less than one twenty-thousandths of a second."

BPA will also add $45 million in shunt capacitors to six other substations in the Portland and Seattle areas by 1993. Four utilities—Puget Sound Power & Light, Seattle City Light, Tacoma City Light and Snohomish Public Utilities—will build a new $40-million substation north of Ellensburg, WA.

NEB projects substantial growth inside Canada and for exports

CALGARY, Alberta—Canada expects to export nearly 2.5 times as much electricity in 2000 as in 1989 (see table), according to a report released Sept. 17 by the National Energy Board (NEB).

Those projections depend largely on Hydro-Quebec's expansion projects, which are being challenged on several levels (*EL&P*, 10/91, p.1).

The report, "Canadian Energy Supply and Demand 1990-2010," says Canada's electrical energy demand, excluding exports, is projected to increase 1.5 percent per year 1989-2010, increasing from 474,386 GWh to 645,586 GWh.

NEB says that even with slow growth rates, natural-gas combustion turbines and demand-side management programs, "Canada will need to rely on substantial expansion of conventional sources of electric power supply, such as hydro, coal and nuclear capacity, to meet the bulk of its electricity demand growth over the study period."

The report also includes, for the first time, projections about gases from the production and use of energy, "including those gases linked to the greenhouse effect, acid rain and low-level ozone." Emissions of carbon dioxide and nitrogen oxides are projected to increase, while volatile organic compounds and sulfur dioxide are expected to decrease, NEB said.

The 473-page report updates one published in 1988.

Copies are available from the NEB Regulatory Support Office, Cadillac Fairview Bldg., 311-6th Ave. SW, Calgary, Alberta, Canada, T2P3H2; telephone 403/292-4800.

Gross Electricity Exports
(Terawatthours)*

	1989	2000	2010
New Brunswick	4.5	2.6	1.9
Quebec	5.7	22.9	26.0
Ontario	2.7	7.5	7.2
Manitoba	1.2	5.9	5.3
Saskatchewan	#	#	#
British Columbia	4.4	6.4	6.4
Canada Total	18.5	45.3	46.8

Numbers have been rounded
*Excludes exchanges # Less than 0.1
Source "National Energy Board Canadian Energy Supply and Demand 1990-2010"

Study shows no EMF effect on sheep

PORTLAND, OR—After a 1-year study, Oregon State researchers found no effects from a 500-kV transmission line on sheep.

During the study, a group of 10 sheep were penned directly beneath the 500-kV line, where electric and magnetic fields (EMF) are strongest. A second control group of 10 sheep was kept away from the high-voltage power line at a point where levels were low.

OSU researchers took more than 6000 blood samples from the sheep over a 10-month period and tested them for fluctuations in the levels of melatonin, a hormone that regulates the body's biological cycles.

The study took place at the Bonneville Power Administration's Ostrander substation near Estacada, OR. Jack Lee, environmental health specialist for BPA, presented the preliminary findings at a recent meeting of the Bioelectromagnetics Society in Salt Lake City. "We found that both the animals under the power lines and those in the control area showed normal melatonin patterns," Lee said. "We found no significant difference between the two groups."

The findings are still under review by OSU. A final report should be available in spring 1992. Researchers are now repeating the study, using two new groups, each of 15 sheep. The larger sampling may provide smaller fluctuations in melatonin levels that may have gone unseen in the first study groups.

Air regulations due this month

WASHINGTON—The Environmental Protection Agency is expected to produce a number of final regulations late in October or in November under the Clean Air Act Amendments of 1990.

Affected areas include rules on operating permits, credits for early reductions, listing of source categories, the "WEPCo fix," and ozone nonattainment for cities.

Under the operating permits portion, participating organizations would likely be required to submit detailed emissions analyses and compliance reports to receive operating permits. The American Boiler Manufacturers Association, and others, have expressed concern about language that might require permit review for some operational changes, even if emissions remain within a permit's allowance.

The guidelines also are expected to cover credits for the early reductions needed to receive a six-year extension to use Maximum Achievable Control Technology. A 90-percent reduction was proposed by EPA for those participating.

The "WEPCo fix" is EPA's answer to the extended debate with Wisconsin Electric Power Co.

Ozone nonattainment is a guidance document for ozone, carbon monoxide, and particulate-matter regulations to come under Title 1.

The above summaries were provided by the "ABMA News" newsletter.

Congress progresses on energy legislation

WASHINGTON—Discussion, debate and hearings continue on the wide-ranging aspects of energy legislation now before Congress.

By mid-October, the Senate omnibus energy policy bill was expected to reach the floor, said Sen. Bennett Johnston (D-LA). With help from Sen. Malcolm Wallop (R-WY), Johnston has indicated the various titles will likely go in order, except for the WEPCo, which will be dropped, because of the EPA fix. Johnston hopes to deliver a bill to the administration during 1992.

Heavy debate continues on opening of the Alaska Natural Wildlife Refuge to exploration and revisions to the Public Utility Holding Co. Act. Several senators have plans to filibuster, according to the "EEI Washington Newsletter."

The House Energy & Power Subcommittee is expected to move its bill to full committee later this fall.

Watch next month's *EL&P* for comparisons of various aspects of the energy bills.

Map now available

TULSA, OK—The "*EL&P* Electric Power Generation and Transmission Systems Map of the U.S." is now available.

The 42x58-inch full-color map includes transmission lines, 230 kV and up, in five categories; investor-owned electric utility names, holding companies and service areas; utility generating facilities' names and locations, 200 MW and larger, by county, size, fuel and operator; major substation locations; and NERC boundaries.

The map sells for $65 in the U.S. and Canada; $95, export. Limited laminated quantities sell for $85 in the U.S. and Canada; $120, export. Contact PennWell Maps, P.O. Box 21288, Tulsa, OK, 74121; 1-800-752-9764.

COMMENTARY

Competitive people a must if utilities are to be competitive

A company can be no better than its people. And a company's people can be no better than its corporate culture dictates.

These may sound a bit like basics from a Management 101 course...or even truisms. In any case, they apply to electric utility organizations, and may well explain why so many electric utilities have had trouble adjusting to the realities of operations today.

Over the past decade, many electric utility organizations have turned to a plethora of non-regulated activities in an effort to be competitive on behalf of investors. Some efforts were related to utility activities, but many were not. But in both cases, a substantial number proved to be total failures; many more have produced only marginal returns. Outside the core utility business, most utilities generally have been out of their league as competitive organizations.

Now, utilities find their core businesses challenged. Becoming competitive today is a matter of corporate life or death tomorrow.

But for utilities to become more competitive, employees must develop a competitive spirit, too. Unfortunately utilities' corporate cultures aren't conducive to such development.

Competitive spirit means that employees see themselves as contributing to achievement of corporate goals. Having the team win, rather than achieving personal goals independently, is the mark of competitive spirit. Unfortunately, most utility engineers and managers operate within a strict set of guidelines directed from the top down. Individual performance determines rewards.

Very simply, the prospect for developing competitive spirit is stifled where corporate cultures dictate employees only do what they are told, perform their assigned tasks as well as they can and keep their mouths shut. Risk-taking, where the rewards depend on achieving corporate goals, is not a normal utility engineering or management function. Incentive programs, promising rewards for successful risk-taking and demonstrated initiative in group/team conduct, still are far from common.

But the industry is changing. Electric utilities have no choice but to become more competitive when confronted by non-utility generators, the prospect of some form of forced open transmission access, and commissions with broader agendas calling for least-cost solutions to energy supply problems. Companies that would not only survive, but hope to grow in this environment must change the ways they operate...internally, and externally. This means developing people at all levels who willingly accept the personal challenge to work harder and smarter, to exercise their initiative to be more effective in the performance of their jobs, to assume the risk of making decisions in the competitive marketplace, and to be rewarded in relation to their efforts' contributions to optimum corporate performance.

The task is not easy. As remarked above, utilities are not known for producing free-thinkers on the job. In fact, as consultant Joe Pohlman recently suggested, many utility employees completely lack a competitive personality. In fact, many openly admit that they sought employment in the electric utility work environment because it wasn't competitive. Changing such ingrained attitudes will be difficult.

But unless the the directors of corporate culture begins to recognize and reward team efforts, instead of individual achievements alone, and can develop employees to become more competitive, and to seek the rewards of team (or corporate) achievement, then the only alternative will be to seek help from the outside. Imported managers not only are willing to assume the risks of working competitively in return for the opportunities of moving up in the organization and improving their earning potentials, but may actually seek increased competition for its own reward. But wholesale import of outside talent creates other equally serious organizational problems.

There's no easy route. Electric utilities must become more competitive. The only realistic questions to be answered are 1) How fast can utility CEOs react to the threats they face?...and 2) To what degree will top utility managements change the corporate culture so more engineers and managers can become profit-producing, customer-satisfying members of the true corporate competitive team?

Robert A. Lincicome, Editor-in-Chief

EL&P ELECTRIC LIGHT & POWER
1250 S. Grove Ave., Barrington, IL 60010

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Papers needed for 3 meetings

Three meetings related to power delivery have issued a call for papers.

Inter-RAMQ, by Dec. 15

The Inter-RAMQ (International Reliability, Availability, Maintainability, Quality) conference is issuing a call for papers for its August 1992 meeting in Philadelphia.

The conference covers technical, economic, and management aspects of reliability and quality progams. Exhibitor displays enable participants to more fully explore the various technologies available for implementing reliability and quality programs.

The conference committee is seeking papers covering a variety of topics applied to fossil and nuclear generation, transmission, distribution, system modeling and design, manufacturing, and other energy systems.

Papers should discuss practical and innovative applications that have been used to improve system performance. The time for presenting the paper should be 20-25 min, followed by a short question and answer period.

Send a 300- to 500-word abstract no later than Dec. 15, 1991 to Dev Raheja, Technology Management Inc., 9811 Mallard Dr., Suite 213, Laurel, MD 20708; 301/792-0710.

For program and registration information contact Bob Filipovits, Pennsylvania Power & Light, 1005 Brookside Rd., Allentown, PA 18106; 215/398-5158.

For exhibit space information contact Ed Parascos, Con Edison of NY, 4 Irving Pl., New York, NY 10003; 212/460-6681.

ICC, by Jan. 1

The IEEE/PES's Insulated Conductors Committee is issuing a call for papers for its special meeting in Birmingham, England, July 20-24, 1992. This special meeting will be held in conjunction with the Electrotech Exhibition, which is expected to attract 50,000 visitors.

This is the first ICC session out of North America. One of its objectives is to acquaint U.S., Mexican, Canadian and European wire and cable companies with each other, and to discuss wire and cable requirements.

The ICC is looking for technical papers, case histories and developmental studies addessing, but not limited to, the following topics:

- New constructions for transmission and distribution cables.
- Cable design and testing programs.
- Accessory development.
- Installation procedures and case studies.
- Operational statistics for transmission and distribution cables.
- Testing methods.
- Accelerated life testing.
- Shielding techniques.
- Control/instrumentation and communication cable designs.
- Low-smoke/zero-halogen transmission and distribution cable materials.
- Mechanical testing of finished transmission and distribution cables.
- Harmonization/globalization issues.

Send declarations of intent no later than January 1, 1992 to: Mr. Lauri Hitvala, Canada Wire & Cable, 22 Commercial Road, Toronto, ON Canada M4G 3W1; phone 416/467-4158; fax 416-421-4779.

Final manuscripts are due no later than March 1, 1992.

CIRED, before Jan. 24

The Twelfth International Conference on Electricity Distribution (CIRED) will be held at the International Conference Center, Birmingham, United Kingdom, May 17-21, 1993.

The conferences are held every two years. The papers and discussions are designed to contribute towards the advancement of the art and science of electricity distribution, in addition to providing an interchange of information and experience.

The U.S. CIRED Liaison Committee is calling for papers from the USA. Papers should emphasize technology and management practices in which the USA is considered to be the world leader. Topics should be selected from these categories: substations, disturbances and protection, cables and overhead lines, operations and control, industrial systems and consumer installations, design and planning.

Send a 500-word synopsis and a draft of the paper before Jan. 24, 1992, to: *U.S. CIRED Liaison Committee, Technical Paper Review Subcommittee, Attn: J.E.D. Northcote-Green, ABB Advanced Systems Technology, 777 Penn Center Blvd., Pittsburgh, PA 15235, ph. 412/825-9224.*

Emissions, dismantling

President George Bush at a Sept. 8 visit to the Grand Canyon National Park praised an agreement to cut, by 90 percent, SO_2 emissions from the Navajo Generating Station. C.M. Perkins, general manager of the Salt River Project, the Phoenix-based utility operator for the plant, also approved. Scrubbers will cost $430 million to construct. Operating costs over 20 years will be about $1.37 billion. The agreement follows three months of negotiations and defuses an 1982 suit the Environmental Defense fund brought against the EPA.

Illinois mandated use of scrubbers for Commonwealth Edison and Illinois Power plants to keep them burning Illinois coal, which has a high-sulfur content. The law includes up-front prudence review, authorization for construction work in progress rate treatment and grants to help offset cost of scrubbers. Changes are needed to comply with the 1995 emissions deadline.

Dismantling of Shoreham's nuclear components continues, after challenges to keep the plant intact failed. New York Power Authority is studying conversion to a natural-gas-fired plant.

Capacity clarified

WASHINGTON—Capacity additions from the Edison Electric Institute appeared considerably lower than estimates from the North American Reliability Council in two graphics *EL&P* published in September.

EEI's "1990 Financial Review, Annual Report of Investor-Owned Electric Utilities" stated 28,882 MW capacity additions, 1990-99.

NERC's "Electricity Supply & Demand 1991-2000," cites utility additions of 71,600 MW, 1991-2000, (*EL&P*, 9/91, p.4).

Periods covered by the two graphs were different. The NERC graphic included units planned, but not authorized by the utility, as well as units with regulatory approval pending. Also, EEI numbers were actual orders, which contributed to the difference, (*EL&P*, 9/91, p.1).

The EEI graphic, named "Capacity Additions," also should have specified that the data was for utilities in the contiguous United States.

Some values were misstated. Additions by electric utilities, 1990-99, should have been 28,882 MW, not 28,879; fossil steam turbine additions in 1990-99, 9845 MW; combustion turbine additions in 1994, 674 MW; hydraulic turbine additions in 1994, zero.